

Features

- High Surge Capability
- Low Power Loss and High Efficiency
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

Maximum Ratings

- Operating Junction Temperature Range: -50°C to +125°C
- Storage Temperature Range: -50°C to +125°C
- Maximum Thermal Resistance:2.0°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1620FCT	MBR1620FCT	20V	14V	20V
MBR1630FCT	MBR1630FCT	30V	21V	30V
MBR1640FCT	MBR1640FCT	40V	28V	40V
MBR1650FCT	MBR1650FCT	50V	35V	50V
MBR1660FCT	MBR1660FCT	60V	42V	60V
MBR1680FCT	MBR1680FCT	80V	56V	80V
MBR16100FCT	MBR16100FCT	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

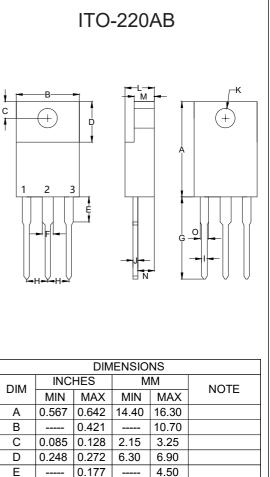
Average Forward Current	I _{F(AV)}	16A	T _C =90°C
Peak Forward Surge Current	I _{FSM}	150A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage			
1620FCT-1640FCT 1650FCT-1660FCT 1680FCT-16100FCT	V _F	0.55V 0.75V 0.85V	I _{FM} =8.0A Per Leg
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.2mA 20mA	Tյ=25⁰C Tյ=100⁰C

Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

Internal Structure

PIN 1 • PIN 2 PIN 3 • PIN 2





DIM	MIN	MAX	MIN	MAX	NOTE
Α	0.567	0.642	14.40	16.30	
В		0.421		10.70	
С	0.085	0.128	2.15	3.25	
D	0.248	0.272	6.30	6.90	
E		0.177		4.50	
F		0.071		1.80	
G	0.500	0.539	12.70	14.20	
Н	0.1	00	2.5	55	
I		0.035		0.90	
J		0.032		0.80	
K	0.102	0.150	2.60	3.80	Φ
L		0.201		5.10	
М		0.140		3.56	
N	0.083	0.126	2.10	3.20	
0		0.071		1.80	



Curve Characteristics

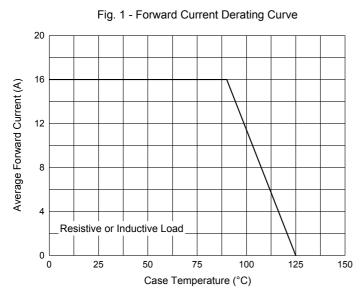
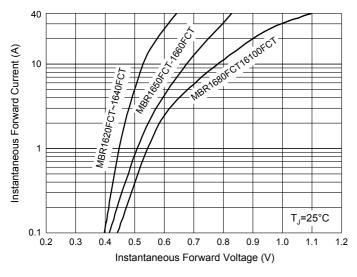
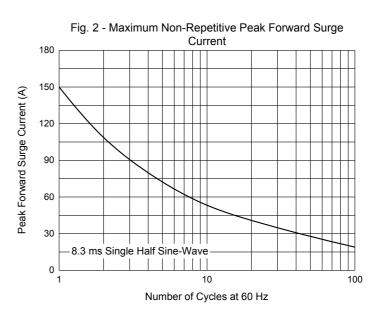
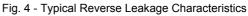
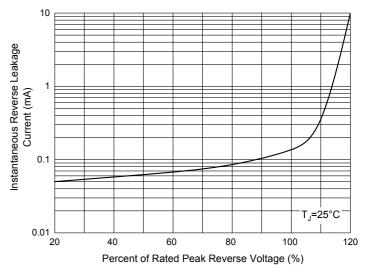


Fig. 3 - Typical Instantaneous Forward Characteristics











Ordering Information

Device	Packing		
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton		

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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Micro Commercial Components (MCC): MBR16100FCT-BP MBR1640FCT-BP MBR1660FCT-BP